UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
INSECTICIDE DIVISION

Patent List No. 47

A LIST OF UNITED STATES PATENTS

Issued from 1917 to 1933 inclusive

relating to

SCREENS FOR PROTECTING MAN, PLANTS, AND FOODS FROM INSECTS

Compiled by

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Washington, D. C.
April, 1935

A LIST OF UNITED STATES PATENTS ISSUED FROM 1917 to 1933, INCLUSIVE, RELATING TO SCREENS FOR PROTECTING MAN, PLANTS, AND FOOD FROM INSECTS.

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Insecticide Division, Bureau of Entomology and Plant Quarantine.

The 41 patents included in this list describe devices for protecting a man's head against mosquitoes or bees, young plants against cut worms, food against crawling insects, a baby carriage against flies, etc.

Every effort has been made by the compiler to make this list of patents complete and no discrimination is intended against any patent mention of which is inadvertently omitted.

The Department of Agriculture assumes no responsibility for the merits of workableness of any of the patents, nor does it recommend any of the inventions listed.

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1,222,995 (Apr. 17, 1917; appl. July 5, 1916). HEAD-PROTECTOR. Fred L. Rhoades, Sault Ste. Marie, Mich. - A device is described which may be easily and quickly attached to or detached from a hat and which will afford a complete protection to the head of the wearer against the attacks of mosquitos, gnats, or other insects.

1,245,441 (Nov. 6, 1917; appl. Apr. 13, 1916). PLANT-PROTECTOR. John H. Cook, San Marcos, Tex. - This wire mesh hood is designed to protect plants, particularly melons and vegetable plants, against insects.

1,251,370 (Dec. 25, 1917; appl. Mar. 21, 1916). MEANS FOR EXCLUDING FLIES AND OTHER VERMIN FROM FOOD-CONTAINING ROOMS. Lionel M. Hendler, Baltimore, Md. - A cold entrance room to prevent the passage of flies into the freezer room of ice cream making establishments, pasteurizing or processing rooms, or storage rooms for sugar, syrup, fruits, etc., is described.

1,257,477 (Feb. 26, 1918; appl. May 7, 1917). PLANT-PROTECTOR. Henry A. Gibson, Winnipeg, Manitoba, Canada. - A paper wrapper to protect young plants from the elements, insects, grubs, worms and other harmful agents is described.

1,287,478 (Dec. 10, 1918; appl. Mar. 26, 1918). MOSQUITO AND FLY PROTECTIVE HEAD-GEAR. Isabella M. J. Simpson, London, England. - A headgear is provided with means for protecting the head, face and neck from insects, which can be worn while asleep and during the day in addition to a helmet or hat, either beneath the helmet or above it. Or the headgear may be made of such materials that during the day no other head covering is required.

1,299,870 (Apr. 8, 1919; appl. Sept. 5, 1918). PLANT-PROTECTOR. John J. Stevenson, Muskegon, Mich. - One-half to A. M. Larsen, Muskegon, Mich. - This sheet metal cylindrical guard device protects the stem or stalk of a plant against cut worms and other insects.

1,324,668 (Dec. 9, 1919; appl. May 15, 1919). PLANT-GUARD. Arthur W. Harris, Sleepy Eye, Minn. - A plant guard arranged to permit of readily placing it in position on the ground around a growing plant to prevent cutworms and other insects from reaching and injuring or destroying the plant is described.

1,340,631 (May 18, 1920; appl. Oct. 8, 1919). PLANT-PROTECTING CAP. Walter R. Schindler, Long Beach, Calif. - A cap of waxed or oil treated paper protects young plants from the sun or frost or from injurious insects.

1,342,277 (June 1, 1920; appl. Feb. 12, 1919). MOSQUITO-MASK. Peter Dowd, Globe, Ariz. - A mask, adapted to be worn over the head and face of a person to prevent attacks of mosquitoes, flies, or other pests is described.

1,359,393 (Nov. 16, 1920; appl. Nov. 18, 1919). HEAD-COVERING FOR PROTECTION AGAINST INSECTS. Virgil T. Leak and Irving J. Thomas, Cocoanut Grove, Fla. - A head covering or screen for protection against insects, such as flies, mosquitoes, bees, and the like is described.

1,392,178 (Sept. 27, 1921; appl. Apr. 16, 1919). COLLAPSIBLE AND VENTILATING BELL OR FORCING-GLASS. Otto C. Kuebler, Yonkers, N. Y. - A forcing glass or bell which will effectively protect the plants from all kinds of insects is described.

1,411,272 (Apr. 4, 1922; appl. May 2, 1921). FOOD SAFE. Carrie Eaton, Rivera, Calif. - A food chest which may be suspended from a tree to protect the food from animals and non-flying insects consists of a bag of loosely woven cloth of triangular cross section.

1,423,659 (July 25, 1922; appl. May 31, 1921). PLANT PROTECTOR. Nels H. Hassel, Los Angeles, Calif. - A device which will prevent snails, worms and the like from getting on a plant, during its early stage of growth is described.

1,432,339 (Oct. 17, 1922; appl. Apr. 4, 1921). PLANT PROTECTOR. Henry C. Jones, Pontiac, Ill. - A device is described that is adapted to be placed over a young plant when the latter has been transferred to a garden or truck field, whereby the plant is protected from injury on account of sudden and excessive temperature changes, from hail, heavy rainfall, snow, etc., and from the attacks of insects and like pests that are destructive to young plants.

1,494,249 (May 13, 1924; appl. Feb. 24, 1923). PROTECTOR FOR APIARISTS. Victor M. Johnson, Greenville, Miss. - This device for protecting a person against the attack of insects comprises a smock-like garment and an attached head screen.

1,548,682 (Aug. 4, 1925; appl. July 7, 1922). PROTECTOR. Harold Gulin, Minneapolis, Minn. - A protector for protecting plants from the sun, cutworms and the like, until the plant gets large enough to stand the heat from the sun and the stalk is too tough or large to be hurt by the worm is described.

1,552,445 (Sept. 8, 1925; appl. Sept. 27, 1923). PLANT PROTECTOR. Marcello Peres, Sonora, Tex. - This wire mesh cylindrical guard protects plants from vermin and animals and from injurious elements such as hail.

1,583,872 (May 11, 1926; appl. Nov. 3, 1925). MOSQUITO NET. Daniel W. Davis, Beaumont, Tex. - This mosquito net is worn over the head, face and neck.

1,584,302 (May 11, 1926; appl. July 29, 1925). PLANT PROTECTOR. Tsuneshichi Kakiuchi, El Centro, Calif. - A conical device constructed from rice straws protects small plants from frost, insects, birds, and snails.

1,602,654 (Oct. 12, 1926; appl. Oct. 1, 1925). PLANT PROTECTOR. William F. Dodson, Ringgold, Va. - One-fourth to Carson T. McDaniel and one-fourth to Ellis H. Henderson, Washington, D. C. - A conical wire mesh device for protecting plants from frost, insects, bugs, etc., is described.

1,615,589 (Jan. 25, 1927; appl. July 26, 1926). PLANT PROTECTOR. Ernest F. Lewis, Cambridge, Ia. - Viola Lewis, Cambridge, Ia. - A cylindrical guard with a conical wire mesh top, over which a shield of waxed paper, sheet metal or the like can be placed, prevents cut-worms, etc., from gaining access to a plant.

1,616,290 (Feb. 1, 1927; appl. Aug. 29, 1925). PLANT PROTECTOR. Joseph D. Walker, Whitesburg, Tenn. - A plant cover which is adapted to surround and cover a plant or plants in a manner to protect the same from animals and fowls, as well as birds, and insects is described.

1,641,244 (Sept. 6, 1927; appl. Dec. 13, 1923). PLANT PROTECTOR. Christine H. Woodruff, Westfield, N.J. - A frustro-conical device with an adjustable disc shaped cover protects a plant from the elements and from cut-worms and insects.

1,657,862 (Jan. 31, 1928; appl. Nov. 8, 1926). SANITARY FRUIT BOWL. Victor A. Matson, Chicago, Ill. - A covered bowl protects fruit from insects and dust.

1,698,021 (Jan. 8, 1929; appl. Jan. 27, 1928). POTTED-PLANT SEAL. John T. Levett, Jr., Little Silver, N. J. - A seal of cement or plaster of Paris prevents the entrance of grubs and insects into a flower pot.

1,704,801 (Mar. 12, 1929; appl. Jan. 11, 1927; renewed Aug. 1, 1928). PLANT PROTECTOR. Oscar Miller, Spokane, Wash. - One-half to F. M. Mitchell, Spokane, Wash. - A cone shaped guard protects the roots of a plant and excludes insects and worms.

1,705,782 (Mar. 19, 1929; appl. Aug. 7, 1926). MOSQUITO GUARD. Joshua B. Powers, New York, N. Y. - This legging of crepe paper, parchmentized paper or impregnated cambric treated with an alcohol solution of gum shellac is designed to protect the wearer against mosquitoes.

1,732,878 (Oct. 22, 1929; appl. Sept. 15, 1928). PROTECTING CANOPY. Charles Collender, Brooklyn, N. Y. - This insect-proof canopy is designed for a baby carriage.

1,739,426 (Dec. 10, 1929; appl. Mar. 30, 1928). PLANT PROTECTOR. Julius A. Stripling, Fort Dodge, Ia. - A wire mesh guard to protect growing plants against bugs and cut worms is described.

1,780,801 (Nov. 4, 1930; appl. Mar. 24, 1930). INSECT-GUARD ATTACHMENT FOR HATS. Leon M. Shlenker, St. Louis, Mo. - International Harvest Hat Co., St. Louis, Mo. - An insect guard attachment designed primarily for use in connection with hats of the sombrero type is described.

1,791,609 (Feb. 10, 1931; appl. May 26, 1930). BEEKEEPER'S VEIL. Albert G. Woodman, Grand Rapids, Mich. - A bee keeper's veil is described particularly adapted for use over the head of one working with bees to protect exposed portions of the person, such as the face and neck, from injury due to stings of the bees.

1,802,262 (Apr. 21, 1931; appl. May 28, 1930). NET. Julius H. Mahler, New York, N. Y. - A net designed for the use of fishermen and the like, as a protection against mosquitoes and like insects, is described.

1,926,053 (Sept. 12, 1933; appl. Apr. 10, 1931). PLANT PROTECTOR. Orville B. Morgan, Rubio, Ia. - A wire mesh housing for guarding young vines and other plants from pests, such as beetles, rodents and insects, is described.

1,747,967 (Feb. 18, 1930; appl. Dec. 20, 1928). PLANT PROTECTOR. Robert B. Bell, Miami, Fla. - A rectangular shield of heavy paper protects a plant from insects and worms as well as cold weather and frosts.

1,748,808 (Feb. 25, 1930; appl. Feb. 27, 1929). DEVICE FOR MAKING PLANT COVERS. Chusaburo Toyoshima, Los Angeles, Calif. - A device for molding plant covers of paper or other material to protect plants, seeds, etc., from insects and the elements is described.

1,780,950 (Nov. 11, 1930; appl. Mar. 23, 1928). PLANT PROTECTOR. John L. Stevason, Indianapolis, Ind. - A knock-down device of fabric on a metal frame work, designed to protect plants from insects and from frost, is described.

1,814,339 (July 14, 1931; appl. May 16, 1929). PLANT SHIELD. Zentaro Sato, Santa Ana, Calif. - This glass cone protects small plants against insects, birds and snails as well as excessive rain and cold.

1,886,711 (Nov. 8, 1932; appl. Mar. 22, 1929). SANITARY FOOD PROTECTOR. Ida M. McLeod, Hobbema, Alberta, Canada. - A tray with a wire screen cover protects food (cakes, pies and the like) from flies and insects while cooling.

1,904,700 (Aprl. 18, 1933; appl. July 20, 1931). PROTECTOR FOR PLANTS. Zeston Starks, Malvern, Ohio. - A plant protector for shielding and sheltering growing plants and their fruits and flowers from the sun, rain, frost, hail, wind, insect enemies, bird and the like, is described.

1,916,868 (July 4, 1933; appl. Jan. 20, 1932). PROTECTOR AND SUPPORTER FOR PLANTS. Zeston Starks, Malvern, Ohio. - A device is described for shielding and sheltering growing plants and their fruits and flowers, during various stages of their growth, from the sun, rain, hail, frost, wind, insect enemies, birds and the like, as well as devices for supporting plants during their growth.

1,930,904 (Oct. 17, 1933; appl. Apr. 11, 1931; in Germany Aug. 2, 1930). PROCEDURE AND DEVICE FOR THE PROTECTION OF PLANTS FROM FROST AND FOR THE REPRESSION OF VERMIN BY ARTIFICIAL FOG. Ulrich Müller, Kiel, Germany. - A process for the protection of plants from frost and for combating parasites, comprises the laying of a fog blanket over the plants by the simple volatilization of a fog-forming and parasite killing material. As fog acid sulphur trioxide, chloro-sulfo acid, sulphur trioxide dissolved in chloro-sulfo acid, etc., can, for example, be employed as answering the purpose. Detailed experiments have shown, that the fog formed by the evaporation of fog acid exercises no detrimental effects on the plants in the low concentration found in the extremely fine distribution of the fog particles. Fluorsulfo acid ($HFSO_3$), in which sulphur trioxide dissolves, is, according to the invention, especially qualified for this purpose. By evaporation of this mixture one succeeds in carrying fluor-combinations over extensive districts in much finer particles than is possible in the distribution of the hitherto employed powder-formed vermin-destroying mediums. A suitable fog-producing apparatus is described.

ASSIGNEE INDEX
(Numbers refer to patents cited)

PATENTEE INDEX